

The Examiner's permission is requested to amend paragraph [0033] of the specification for Published Application Number US 20040091633:

[0033] The corona field generates heat, and an orifice 326 incorporated within the coronal head provides cooling. The orifice is coupled to a compressed air supply, which is cooled by a ~~Vortex-326~~ vortex of compressed air chiller prior to being coupled to the orifice. Several orifice topographies are anticipated as will be set forth in more detail below. An air jet is released from the orifice. The air jet has several advantageous functions. First, the air jet feeds the corona field enhancing the ion treatment process. Second, the air jet cools the substrate. Overheated substrates may unacceptably deform causing rejection of the substrate; cooling helps control the unacceptable deformation of the substrate. Third, the air jet focuses at least a portion of the corona field. It should be noted in the photograph of FIG. 3 that the corona head 322 is in close proximity with the print drum 204. The corona head produces a high voltage field, which may short or arc to the print drum due to the close proximity between the print drum and the corona head. This may not only damage the drum, but also reduce the effectiveness of the corona ion treatment process. The cup substrate turns on the axis of the attached mandrel pulling the corona field around the facilitating arching to the print drum. Preferably substantially one turn or 390 degrees of rotation of the substrate are performed during corona ion treatment. In other embodiments a multitude of turns may be used. The air jet integral to the corona head 322 helps focus the corona ions within a predefined area, thus reducing the likelihood of arching to the print drum 204 or other surrounding components.